

REMARKS

Objection to the Drawings

A drawing of the disclosure is objected to. Amendment to the drawing was made to overcome the objection cited by the Office Action. Fig. 3 has been amended to include descriptive labels in conformance with 37 CFR 1.84(n) and 1.84(o). Attached is a Replacement sheet in compliance with 37 CFR 1.121(d).

Objection to the Specification

The Specification of the disclosure is objected to by the Examiner. Amendment to paragraph [0028] of the specification has been made to overcome the objection cited by the Office Action. No new matter has been introduced, and the amendment brings the specification into conformance with the drawings.

Paragraph [0040] was objected to, but Applicant does not believe that an amendment is necessary. The Examiner suggested "10B/8B" terminology is needed instead of "8B/10B". In general, a skilled person in the art may refer to an encoder and a decoder circuit by the standard's name. In the example of the 8b/10b protocol, a skilled person in the art may refer to the encoder portion and the decoder portion of the system performing the protocol as an "8B/10B". Applicant believes that paragraph [0040] is sufficiently described to be meaningful to a skilled person in the art.

Objections to the Claims due to informalities

Claims 1, 3, 4, 7, 9, 11-14, 18, 19, 20, 24, 26, 27, and 31 are objected to, due to minor informalities. Amendments to the claims above have been made to overcome the objection cited by the Office Action, and no new matter has been introduced. Claims 3 and 11 have been cancelled; therefore, the objection to Claims 3 and 11 is moot.

Other minor clerical errors were found in Claims 2, 30, 33, and 35, and corrected by Applicant in the present amendment. No new matter has been introduced by the amendments.

Rejections Under 35 USC § 112

Claims 24-26 and 33-36 are rejected under 35 USC § 112. Applicant respectfully disagrees and submits that Claims 24-26 and 33-36 as originally presented would have been understood by a person skilled in the art. However, in the interest of advancing prosecution, amendments to correct the minor clerical errors of Claims 24 and 26 have been made. Applicant believes that Claims 24-26 are patentable, and allowance of Claims 24-26 is respectfully requested.

Similarly, amendments to correct minor clerical errors of Claims 33 and 35 have been made. Applicant believes that Claims 33-36 are patentable, and allowance of Claims 33-36 is respectfully requested.

No new matter has been introduced to Claims 24-26 and 33-36, and Applicant respectfully request allowance of Claims 24-26 and 33-36.

Rejections Under 35 USC § 102(e)

Claims 1-2, 6-8, and 20-36 are rejected under 35 USC § 102(e) as being anticipated by Lesea, U.S. Patent 7,218,670 ("Lesea"). Applicant respectfully disagrees for reasons set forth. Reconsideration and allowance of the application is respectfully requested.

Claim 1 is amended to include features of Claim 3, where Applicant claims an extractor including a comparator, a counter and a sampler of a true random number generator. Support for the amendment may be found at least in paragraphs [0075] and [0076]. Applicant believes that Claim 1 is not shown to be suggested by Lesea. Therefore, Claim 1 is believed to be allowable, and allowance of Claim 1 is respectfully requested.

In the "DETAILED ACTION" section of the Office Action, the Examiner alleges that Lesea teaches a system (Lesea, FIG. 4) having similar elements as described by the present invention (Fig. 3). Applicant respectfully disagrees, and submits that the Lesea reference cited does not suggest nor teach a sampler.

The Lesea reference generally teaches a method of measuring performance of a transceiver in an integrated circuit (IC). Fig. 4 of the Lesea reference describes a system for performing such task. The Lesea reference includes elements, such as a

programmable logic device (PLD) 450 of Fig. 4 (a PLD is a type of an IC), host programmer 490 of Fig. 4, and a clock generator 438 of Fig. 4, that may be common with the present invention. The Lesea reference does not teach nor suggest a system for generating random numbers including an extractor as recited in Claim 1.

More particularly, the Lesea reference is generally concerned with determining the performance of a receiver of a transceiver circuit of an IC. Lesea does not teach nor suggest a system for generating true random numbers based on sampling bits of a counter that counts errors between recovered data and reference data determined by a comparator. Therefore, the features of Claim 1 are not shown to be taught by Lesea.

Claim 7 is amended to include features of Claim 11, where Applicant claims an extraction circuit including a sampler to sample at least a portion of an output of the jitter performance tester. Support for the amendment may be found at least in paragraph [0076]. Applicant believes that the features of Claim 7 are not shown to be taught or suggested by Lesea for substantially the same reasons set forth above with respect to Claim 1. Therefore, Claim 7 is believed to be allowable, and allowance of Claim 7 is respectfully requested.

Claim 20 is amended to include features of Claim 21 and other features that distinguish the present invention over Lesea. Claim 20 includes the features of generating a first data, and sampling at least a portion of the counting. Support for the amendment may be found at least in paragraphs [0068], [0075], and [0076]. Applicant believes that features of Claim 20 are not shown to be taught or suggested by Lesea for the reason set forth above. Therefore, Claim 20 is believed to be allowable, and allowance of Claim 20 is respectfully requested.

Claims 2-6 depend from Claim 1 and include further features that refine the features of Claim 1. Note that Applicant has amended Claim 4 merely to maintain proper claim dependency. Therefore, Claims 2-6 are also believed to be patentable, and allowance of Claims 2-6 is respectfully requested.

Claims 8-19 depend from Claim 7 and include further features that refine the features of Claim 7. Note that Applicant has amended Claim 12 merely to maintain proper claim dependency, and has amended Claim 9 in light of the amendments to

Claim 7. Therefore, Claims 8-19 are also believed to be patentable, and allowance of Claims 8-19 is respectfully requested.

Claims 22-36 depend from Claim 20 and include further features that refine the features of Claim 20. Therefore, Claims 22-36 are also believed to be patentable, and allowance of Claims 22-36 is respectfully requested.

Claims 3, 11, and 21 are hereby cancelled, and the features of these claims are incorporated in Claims 1, 7, and 20 respectively.

Objections to the Claims

Claims 3-5 and 9-19 are objected to as being dependent from a rejected base claim, but otherwise allowable. Applicant thanks the Examiner for this acknowledgement of patentable subject matter.

Applicant believes that all rejections have been overcome by the above amendments and that these objections have therefore been overcome. Claims 4 and 5 depend from Claim 1, which Applicant believes is patentable for reasons set forth above. Claims 9, 10, and 12-19 depend from Claim 7, which Applicant believes is patentable.

CONCLUSION

No new matter has been introduced by any of the above amendments. Reconsideration and a notice of allowance are respectfully requested in view of the Remarks presented above. If the Examiner has any questions or concerns, a telephone call to the undersigned is invited. The Applicant's attorney can be reached at Tel: 408-879-4641 (Pacific Standard Time).


Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on September 27, 2007.

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Name



Signature